County Case ID # _____

West Nile Case Investigation Form

Utah Department of Health, Office of Epidemiology

State Case ID # _____
(For state use only)

Instructions:

1. Complete West Nile Case Investigation Form for all probable or confirmed cases of West Nile virus infection (see case definitions below).
2. List county case ID number (i.e., NETSS ID number)
3. Share information gathered with the Environmental Health division of your local health department.
4. Fax page 5 of investigation form to your local mosquito abatement district (go to www.umaa.org for local contact info).
   Inform the patient: Page five (5) asks questions related to the patient seeing or being bit by a mosquito at home, work, or recreation sites. This information will be faxed to the mosquito abatement districts for follow up in the specified areas.
5. Fax completed form to the Utah Department of Health, Office of Epidemiology (801-538-9923).

West Nile Virus Case Definitions:

West Nile Fever

-Confirmed
A Clinically compatible case **plus one** of the following:

1. 4-fold or greater increase in antibody to WNV in paired serum
2. Isolation of WNV from blood, CSF, tissue, or other body fluid
3. WNV specific IgM antibodies demonstrated in serum and confirmed in the same or later specimen (most commonly used test)

-Probable
Clinically compatible illness with WNV specific antibodies detected by antibody-capture enzyme immunoassay, but no results of a confirmatory test in the same or convalescent serum.

West Nile Meningitis and Encephalitis

-Confirmed
Febrile illness with clinically compatible neurological presentation
plus one of the following:

1. 4-fold or greater increase in antibody to WNV in paired serum or CSF
2. Isolation of WNV from blood, CSF, tissue, or other body fluid
3. IgM antibody to WNV in CSF

-Probable
Febrile illness with clinically compatible neurological presentation
plus one of the following:

1. Serum IgM antibody to WNV
2. Elevated IgG antibody to WNV in a convalescent phase serum

Patient name: _____

Parent or Contact Person: _____

Address/Apt: _____

City: _____ County:_____ Zip Code: _____

Telephone: (H)_____(W)_____(Other)_____

Birth Date: ____/____/_____ Age: _____ Sex: M F

Race: White Black Asian/Pacific Islander Native American Unknown Other _____
Ethnicity: Hispanic Non-Hispanic

Occupation: _____

Date of onset of symptoms: _____/_____/_____

Please describe patient symptoms (check if experienced symptom):

- ☐ Fever (_____°)
- ☐ Fatigue
- ☐ Lymphadenopathy
- ☐ Muscle aches
- ☐ Meningismus
- ☐ Rash
- ☐ Nausea
- ☐ Vomiting
- ☐ Anorexia
- ☐ Other, Describe_____
- ☐ Headache
- ☐ Stiff neck
- ☐ Disorientation
- ☐ Convulsions
- ☐ Paralysis or Paresis
- ☐ Coma
- ☐ Tremors
- ☐ Altered Level of Consciousness

Please indicate if laboratory testing has been requested for West Nile Virus from:

Acute Serum (< 8 days since symptom onset)
☐ Total WBC count: _____
lymph: _____ PMN/neut: _____
☐ WNV antibodies (date: ____/____/_____)
(IgM:_____IgG:_____)

Convalescent serum (2-4 weeks after acute)
☐ WNV antibodies (date: ____/____/_____)
(lab:_____)

CSF (date: ____/____/_____)
☐ WNV antibodies (IgM:_____IgG:_____)
☐ WBC count: _____
☐ Protein: _____

Other Tests (eg: latex panel results)
_____
_____
_____

Laboratory name: _____ Phone: _____

Attending Physician: _____ Phone: _____

Initial Report Status: Confirmed Probable Suspect Not a case Unknown

Presentation of Illness (check all that apply):
☐ Meningitis ☐ Encephalitis ☐ **West Nile Fever** ☐ Acute Flaccid Paralysis
☐ Unknown ☐ Other _____

Died: Yes No Unknown If Yes, Date of Death: _____/_____/_____

Hospitalized: Yes No Unknown Name of Hospital: _____
Phone:_____

Date of Hospital Admission: _____/_____/_____ Total Number of days: _____

Reported by:_____ Phone Number:_____
Informant:_____
Relationship to Patient: _____

Does the patient have a history of vaccination or disease for the following:

- ❑ Yellow Fever
- ❑ Japanese Encephalitis
- ❑ Dengue Fever
- ❑ St. Louis Encephalitis
- ❑ Other Encephalitis Describe: _____ (use p.6 if needed)

Did the patient give blood within the past 6 weeks: Yes No Unknown
If yes, Institution's name: _____
Date of donation: / /

MODE OF TRANSMISSION

Did the patient have a transfusion in the 20 days prior to onset of symptoms: Yes No Unknown
If yes, Institution's name: _____
Date of transfusion: _____/_____/_____

Has patient had a transplant within the 4 weeks prior to onset: Yes No Unknown
If yes, Institution's name: _____
Date of transplant: _____/_____/_____

Is patient pregnant: Yes No Unknown Due Date: ____/____/_____
Physician:_____ Hospital:_____
Is patient breastfeeding or being breastfed: Yes No Unknown Duration: _____
Did patient have workplace exposure (needle stick, laceration, etc.): Yes No Unknown

Which of the following apply?

- ☐ Used insect repellant with DEET
- ☐ Used insect repellant without DEET
- ☐ Wore long sleeved clothing
- ☐ Fixed tears in screens of doors and windows
- ☐ Used tent or mosquito netting when sleeping outdoors
- ☐ Used mosquito fish if have ornamental pond
- ☐ Used bug zapper/UV light
- ☐ Removed standing water around house
  - ☐ tires
  - ☐ plastic swimming pools
  - ☐ wheel barrow
  - ☐ flower pots
  - ☐ toys
  - ☐ rain gutters
  - ☐ barrels
  - ☐ buckets and cans
  - ☐ other_____
- ☐ Repaired leaky faucets and sprinklers
- ☐ Changed water in bowls or troughs for animals daily
- ☐ Cleaned garden ponds/ornamental pools and stocked with fish
- ☐ Changed bird bath water weekly
- ☐ Stayed indoors dusk through dawn
- ☐ Other_____

TRAVEL HISTORY (for the two weeks prior to onset of symptoms)

Has patient traveled **OUT OF CITY**: Yes (provide address) No Unknown

_____

(Street number) (City) (State) (Zip code)

Dates of Travel ____/____/____ to ____/____/____

Is there an open or standing water source at this location? ☐ yes ☐ no ☐ unk

If yes, please describe (e.g. pond, stream, pool, etc):

_____

Time of Day Outdoors:	Check if yes:	Description of Location/Activity:	Mosquitoes Observed?	Mosquito Bite?
Dawn (5am-7am)				
Day (7am-8pm)				
Dusk (8pm-10pm)				
Night (10pm-5am)				

Has the patient traveled **OUT OF STATE**: Yes (provide address) No Unknown

_____

(Street number) (City) (State) (Zip code)

Dates of Travel ____/____/____ to ____/____/____

Is there an open or standing water source at this location? ☐ yes ☐ no ☐ unk

If yes, please describe (e.g. pond, stream, pool, etc):

_____

Time of Day Outdoors:	Check if yes:	Description of Location/Activity:	Mosquitoes Observed?	Mosquito Bite?
Dawn (5am-7am)				
Day (7am-8pm)				
Dusk (8pm-10pm)				
Night (10pm-5am)				

Has the patient traveled **OUT OF COUNTRY**: Yes (provide address) No Unknown

_____

(Street number) (City) (Country)

Dates of Travel ____/____/____ to ____/____/____

Is there an open or standing water source at this location? ☐ yes ☐ no ☐ unk

If yes, please describe (e.g. pond, stream, pool, etc):

_____

Time of Day Outdoors:	Check if yes:	Description of Location/Activity:	Mosquitoes Observed?	Mosquito Bite?
Dawn (5am-7am)				
Day (7am-8pm)				
Dusk (8pm-10pm)				
Night (10pm-5am)				

Mosquito Abatement Information

HOME

Home address:

_____

(Street number) (City) (State) (Zip code)

Is there an open or standing water source at this location? ☐ yes ☐ no ☐ unk

If yes, please describe (e.g. pond, stream, pool, etc):

_____

For the two weeks prior to onset of symptoms, please answer the following related to **HOME**:

Time of Day Outdoors:	Check if yes:	Description of Activity:	Mosquitoes Observed?	Mosquito Bite?
Dawn (5am-7am)				
Day (7am-8pm)				
Dusk (8pm-10pm)				
Night (10pm-5am)				

WORK

Work address: _____

(Street number) (City) (State) (Zip code)

Is there an open or standing water source at this location? ☐ yes ☐ no ☐ unk

If yes, please describe (e.g. pond, stream, pool, etc):

_____

For the two weeks prior to onset of symptoms, please answer the following related to **WORK**:

Time of Day Outdoors:	Check if yes:	Description of Activity:	Mosquitoes Observed?	Mosquito Bite?
Dawn (5am-7am)				
Day (7am-8pm)				
Dusk (8pm-10pm)				
Night (10pm-5am)				

RECREATION

Please list all recreational places visited by the patient in the city for the 2 weeks prior to onset:

1. _____
2. _____
3. _____
4. _____

Thinking about these places, please answer the following questions:

Is there an open or standing water source at this location? ☐ yes ☐ no ☐ unk

If yes, please describe (e.g. pond, stream, pool, etc), and indicate which travel location(s) this pertains to:

_____

For the two weeks prior to onset of symptoms, please answer the following related to **RECREATION**:

Time of Day Outdoors:	Check if yes:	Description of Activity:	Mosquitoes Observed?	Mosquito Bite?
Dawn (5am-7am)				
Day (7am-8pm)				
Dusk (8pm-10pm)				
Night (10pm-5am)				

Final Checklist

1) Report to Utah Department of Health, Office of Epidemiology
   Office (801) 538-6191
   Fax (801) 538-9923
   After Hours Pager 1-888-EPI-UTAH (1-888-374-8824)
2) Fax page 5 of investigation form to your local mosquito abatement district (go to www.umaa.org for local contact info)
3) Give any information on standing water to Environmental Health at your local health department for follow up.
4) Arrange for convalescent serum to be drawn if not already done
5) Final status- Confirmed Probable Suspect Not a case Unknown

Notes

Utah Department of Health, Office of Epidemiology, PO Box 142104, Salt Lake City, UT 84114-2104
Telephone: 801-538-6191, Fax: 801-538-9923, Toll free: 1-888-EPI-UTAH (374-8824)
Adapted from the Centers for Disease Control and Prevention, Louisiana, and Utah Local Health Departments
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